



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,853	06/21/2006	Heikki Riittinen	60091.00480	8582
32294	7590	10/31/2008	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			DOAN, KIET M	
8000 TOWERS CRESCENT DRIVE				
14TH FLOOR			ART UNIT	PAPER NUMBER
VIENNA, VA 22182-6212			2617	
			MAIL DATE	DELIVERY MODE
			10/31/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/583,853	RIITTINEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	KIET DOAN	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 June 2006.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 June 2006 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/21/06</u> .  | 6) <input type="checkbox"/> Other: _____ .                        |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poeluev (US 7,366,794 B2) in view of Buddhikot et al. (US 2005/0013280 A1) and further view of Bahl et al. (US 2003/0069016 A1).

Consider **claims 1, 6, 9-12**. Poeluev teaches a method for maintaining a secure tunnel in a packet-based communication system, the method comprising the steps of: establishing a secure tunnel between a security gateway and a mobile terminal being located at a first address in a first network, wherein the security gateway connects the first network to a second network Col. 2, lines 15-23, lines 53-65, Fig.1 show public network 12 connect to virtual private network 14 through a tunnel 22 and security gateway 24 wherein the public network 12 is a first network and virtual private network 14 is a second network).

**Poeluev fails to explicitly teach** that the mobile terminal has a second address that identifies the mobile terminal in the second network in the security gateway, identifying the secure tunnel based on the second address in packets destined for the mobile terminal from the second network; detecting a change in the first address of the mobile terminal;

in response to the detecting step, sending an update message to the security gateway, wherein the update message includes a new address value of the first address; and

based on the update message, updating the first address associated with the secure tunnel.

In an analogous art, **Buddhikot teaches** the mobile terminal has a second address that identifies the mobile terminal in the second network (Paragraph [0012], [0040-0041]);

in the security gateway, identifying the secure tunnel based on the second address in packets destined for the mobile terminal from the second network (Paragraphs [0056-0058]).

It would have been obvious at the time that the invention was made to modify Poeluev with Buddhikot's system such that establishing a secure tunnel between a security gateway and a mobile terminal being located at a first address in a first network and mobile terminal has second address that identifies the mobile terminal in the second network in order to improve the communication without breaking the existing connection.

However, the combination of **Poeluev and Buddhikot fail to explicitly teach** detecting a change in the first address of the mobile terminal;

in response to the detecting step, sending an update message to the security gateway, wherein the update message includes a new address value of the first address; and

based on the update message, updating the first address associated with the secure tunnel.

In an analogous art, **Bahl teaches** detecting a change in the first address of the mobile terminal; in response to the detecting step, sending an update message to the security gateway, wherein the update message includes a new address value of the first address (Abstract, Paragraphs [005], [0022-0026]; and

based on the update message, updating the first address associated with the secure tunnel (Paragraph [0035]).

It would have been obvious at the time that the invention was made to modify Poeluev and Buddhikot with Bahl's system such that establishing a secure tunnel between a security gateway and a mobile terminal being located at a first address in a first network and mobile terminal has second address that identifies the mobile terminal in the second network and changing new address with update message to the security gateway in order to improve the communication without breaking the existing connection.

Consider **claims 2**. The combination of Poeluev and Buddhikot and Bahl teach a method according to claim 1. Further, Poeluev teaches wherein the first network is a public packet network (Fig.1, No.12) and the second network is a private packet network (Fig.1, No.28).

Consider **claim 3**. The combination of Poeluev and Buddhikot and Bahl teach a

method according to claim 1. Further, Bahl teaches wherein the update message is a normal data message to be transmitted to the security gateway when the change is detected (Paragraph [0005], [0022-0023]).

Consider **claim 4**. The combination of Poeluev and Buddhikot and Bahl teach a method according to claim 1. Further, Buddhikot teaches wherein the sending step includes creating a dummy packet and sending it as the update message to the security gateway (Paragraph [0156]).

Consider **claim 5**. The combination of Poeluev and Buddhikot and Bahl teach a method according to claim 1. Further, Buddhikot teaches wherein the sending step includes creating an update message including a NAT-D payload for detecting a network address translation device between the mobile terminal and the security gateway (Paragraphs [0070], [0091]).

Consider **claim 7**. The combination of Poeluev and Buddhikot and Bahl teach a mobile terminal according to claim 6. Further, Buddhikot teaches wherein the address update means are configured to create a dummy packet if there is no data to be sent through the secure tunnel when the first address changes (Paragraphs [0155-0156]).

Consider **claim 8**. The combination of Poeluev and Buddhikot and Bahl teach a mobile terminal according to claim 6. Further, Buddhikot teaches wherein the address

update means are configured to create an update message including a NAT-D payload for detecting a network address translation device between the mobile terminal and the security gateway (Paragraphs [0037-0040]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIET DOAN whose telephone number is (571)272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Appiah N. Charles can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kiet Doan/  
Examiner, Art Unit 2617

/Charles N. Appiah/  
Supervisory Patent Examiner, Art Unit 2617